

I. Preliminary Remarks

This response is timely filed. Should the Patent Office determine that additional fees are required for consideration of this response, permission is hereby granted to charge such fees to Deposit Account No. 033975. Any overpayments should be credited to the same account.

II. Restriction

Citing 35 U.S.C. § 121, the examiner alleged that claims 1-29 are directed to the following five distinct inventions:

Group I. Claims 1-9, and 19-29 (claims directed to a polynucleotide nickase containing one subunit capable of cleaving one strand of DNA and a second subunit incapable of cleaving the other strand of DNA, a method for introducing nicks into DNA by using the nickase and a kit);

Group II. Claims 10-18 (claims directed to a process for producing a nickase containing one subunit that will cleave one strand of DNA and a second subunit capable of cleaving the other strand);

III. Election

The applicants hereby elect Group I, which includes claims 1-9, and 19-29 directed to a polynucleotide nickase containing one subunit capable of cleaving one strand of DNA and a second subunit incapable of cleaving the other strand of DNA, a method for introducing nicks into DNA by using the nickase and a kit, with traverse.

IV. Traversal Arguments—Restriction of Claims 1-29 are Improper

The restriction requirement includes an allegation that the two groups are directed to two different enzymes that have different properties and thus patentably distinct. The applicants respectfully submit that the process of claim 10 would produce the nickase as defined by claim 1. Specifically, the applicants respectfully submit the examiner's characterization of claims 10 to 18 as directed to a process for producing a nickase containing two active subunits is in error. Rather, claim 10 recites a step of "inactivating the catalytic activity of one subunit of a restriction endonuclease." Further, the restriction endonuclease is also defined in the claim as having two subunits, each of which has a catalytic domain

capable of cleaving a DNA strand. Therefore, claim 10 relates to a process which involves inactivating one subunit, and thus the product of this process cannot contain two active subunits.

Furthermore, the product produced by the process of claim 10 is a strand specific polynucleotide nuclease (line 1, claim 1) comprising an endonuclease that recognizes an asymmetric nucleotide recognition sequence (lines 5 and 6 of claim 1). This endonuclease has two subunits (lines 3 and 4 of claim 1), one of which lacks endonuclease activity (line 2, claim 1).


In view of the foregoing, the process of claim 10 includes all the features of claim 1. Therefore, any search designed to identify documents relevant to the patentability of the claimed nuclease in Group 1 will employ the same or similar search terms and techniques as Group II, and therefore, yield the same or similar documents as a search designed to identify documents related to the process claims of Group II. Accordingly, the applicants submit that the recently issued restriction is unnecessary and improper. Should the present restriction be maintained, the applicants hereby notify the examiner of their intention to request rejoinder upon a notice of allowance of the claims of Group I.

V. Conclusion

In view of the foregoing, the applicant submits that they have fully and properly responded to the outstanding restriction requirement. Should the examiner have any questions or comments regarding this response or the application, the examiner is urged to contact the undersigned at the number indicated.

Respectfully submitted,

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